Digitising your Commercial & Project office

Applying new AI & BI technology on current in-flight projects

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What we hope to show you today

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SACHIN MELWANI, DADA Enterprises

- 20+ years of ERP transformation experience from the Client, Prime Integrator and Tier Supplier perspectives
- Expert in Project Management Methodologies, Tools, and Product Development Lifecycle(s): MACostE, MAPM, CMIRM, IVM, P3M3 Qualified Assessor, Deltek Functional Certified, and Six Sigma certified
- Skilled user of tools to support agile delivery management (Jira, Confluence, Kanban boards, Waterfall, RPA and Scrum)
- Deltek Partner, Oracle Partner, Microsoft Gold Partner, AXELOS Consulting Partner (ACP), Nintex, Pipefy and InovaPrime Partner

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New digitisation & AI technology applied only on new projects

- Many businesses *still find it difficult to digitise* their project processes as their legacy commercial documents and HSEQ procedures are still in static form.
- And so, adoption of new project technologies can *only happen in piece-meal form*, with limited benefit as companies worry of the physical effort in migrating historical data.
- However, it is *precisely these legacy projects* where this new technology has the maximum benefits.
- What we need is *new technology, to be able to be quickly deployed on legacy projects*.
- Through *Machine Learning and Optical Character Recognition (OCR) technology*, static PDF procedures can be migrated into SQL dBs.
- This then allows new AI & BI technology to be applied on *current in-flight projects*' commercial and HSEQ records.

Learning points that you will get from this webinar

Using past case studies when mass OCR digitisation has been used, we shall demonstrate the following lessons learnt:

- Access to analytics to target straight-through-processing goals
- Master Data: clean, accurate, and ready for consumption
- ‘Human-in-the-loop’ is not always a bad thing
- Exceptions will occur, how to make sure you have the tools to catch and work them
- The requirement for a customer to appoint a “Champion” who owns the projects and ensure the business adopts the change

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Who We Are

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Why DADA

- **Since 2009** we have delivered real business transformation.
- **Our Core USP is our unique "Consultancy as a Subscription"** model to give you access to flexible expertise and resources.
- **With guaranteed delivery from an AXELOS P3M3 Consulting Partner,** we provide on-demand resourcing & flexible monthly plans.
- **Consulting Service at Contractor prices** allowing you to scale up at speed, without the Employer H&S risks and headcount commitments.

"We have helped companies from project controls setup, NEC4 contract administration, ERP systems integration (Ares PRISM, Deltek Cobra, Oracle, SAP, BIM, MS Power Platform), critical projects delivering to automating O365/SharePoint business workflows."

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A Trusted Partner

PLAN, PROBLEM SOLVE

Get expert help & insight to plan your next project. Problem solving by project experts: speed optimised, costs reduced.

DELIVER PROJECTS

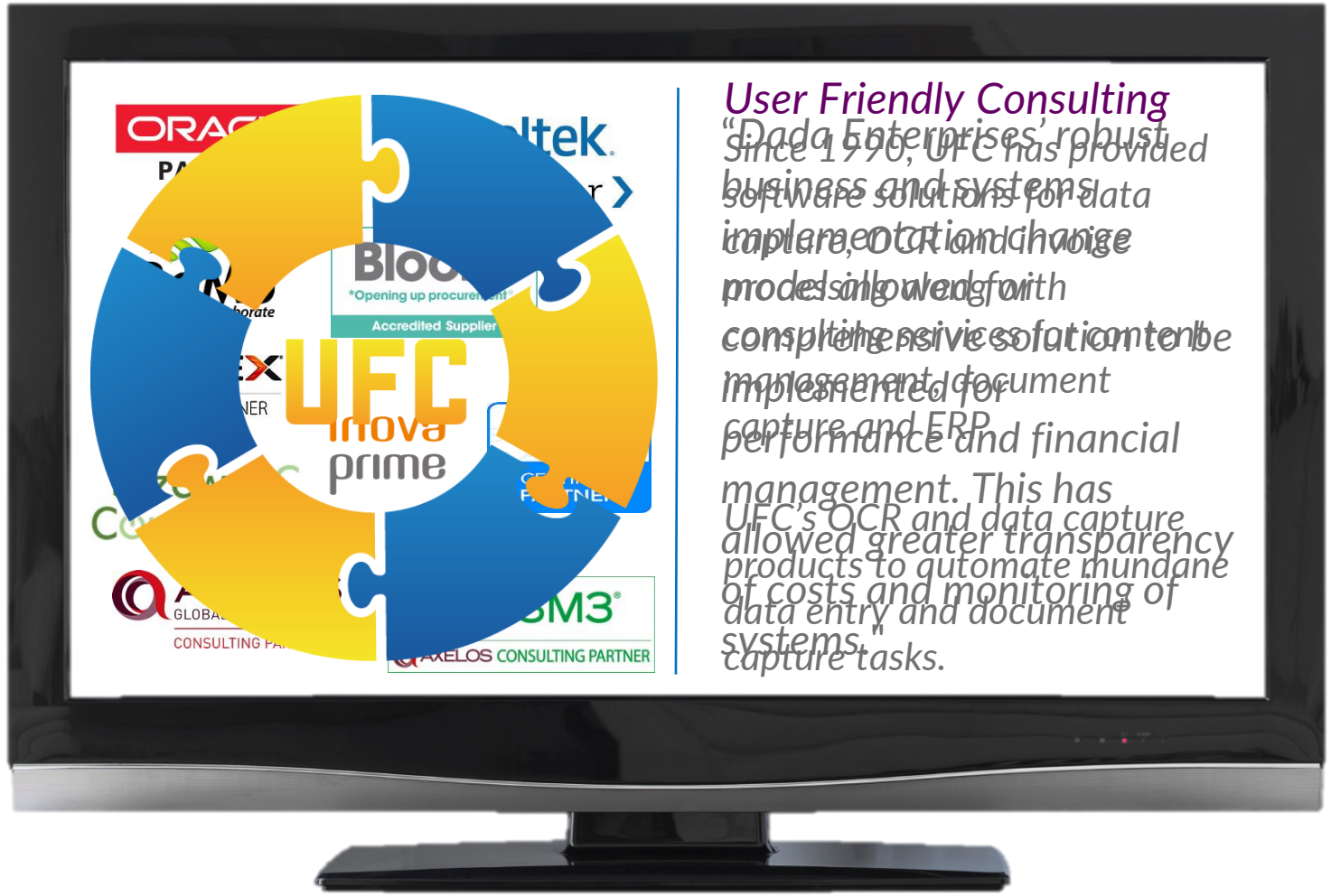
Project Management, ERP/PPM/EAM Systems Integration & Staffing. Our specialist tools and on-site staff help you to deliver to KPIs. Guaranteed.

BUSINESS AUTOMATION

Automate Key Business Processes. Cut form-filing, Boost productivity, transparency & ROI using our program team.

ON-DEMAND RESOURCING

Resource Managed Project Staff. Get the mission critical resources you need, when you need them. No long contracts or commitments.



User Friendly Consulting

Since 1990, UFC has provided software solutions for data capture, OCR and invoice processing with consulting services for content management, document capture and ERP.

"Dada Enterprises' robust business and systems implementation change models allowed for a comprehensive solution to be implemented for performance and financial management. This has allowed greater transparency of costs and monitoring of data entry and document capture tasks.

UFC's OCR and data capture products to automate mundane systems."

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Past Case Studies:

Challenge → Solution → Value

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East Midlands Railway improved their email processing time by 5 hrs+ per day using ABBYY Digital Intelligence and Advanced Classification from Engeneum

EMR
EAST MIDLANDS RAILWAY

"I was looking for a more automated approach to reduce our manual resource time and fulfil our reporting needs. We are now well below our 20 day KPI response time and have been impressed with the flexibility and ease of integration to our CRM system."

- Nara Burne, Customer Experience Systems Manager East Midlands Railway

Challenge

- East Midlands Railway (EMR) changed its reporting processes so that staff had to review incoming complaint emails, record, and report the cause of the complaint at the time the complaint was received, instead of at the time of response—which could be up to 20 days later.
- Need for real-time integration with their CRM for query resolution.

Solution

- Implemented ABBYY's Digital Intelligence platform with advanced classification has automated the email process by capturing key data from text on emails and document attachments.
- The solution classifies emails without any manual input. Data is then automatically routed to EMR's CRM system.

Value

- EMR reduced customer response times and at least 5 manual hours per day.
- Approximately 65,000 emails per year are now processed automatically, and customer response times are well below the KPI of 20 day working days.
- Improved customer processing times.

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Automated supplier invoice & credit note processing with ABBYY and Engeneum, saving 60% of processing time with an automated seamless connection to Sage

scena

"Engeneum & ABBYY provided us with a processing solution that has saved 60% of the previously manual process on invoice entry, freeing up our accountants' time to focus on the results, the job costings, and other KPIs. In terms of client value, this was huge."

- John Bradney, Accountant at Scena

Challenge

- Huge volume of incoming invoices, which took an average of 3 days per week to process, was costly in terms of labour and disruption.
- Pain points for the finance team included paperwork bottlenecks, inconsistent delivery of approved invoices, and no real control over lost (or parked) invoices .

Solution

- Scena transformed their accounts payable processes and removed the need for time consuming manual entry by implementing Engeneum's Invoice Processing solution with ABBYY Digital Intelligence.
- Scena now processes, and approves invoices in a fraction of the time resulting in improved operational efficiency and cost savings.

Value

- Significantly reduced accounts payable processing costs by improving operational efficiency, reducing errors, and automating error handling.
- Electronic storage of paper copies of invoice documents.
- Saving 60% of processing time with automated supplier invoice & credit note processing.

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Renault Argentina transformed Finance Department operations with ABBYY Digital Intelligence to automate invoice processing to be 100% digital

GROUPE RENAULT ARGONTECH

Incorporating this new technology allowed us to transform an operational process into 100% digital, and at the same time allowed us to introduce ABBYY solutions to other areas of the company and to other countries in the Region (such as the Shared Services Center located in Colombia).

↳ Ariel Varela, Accounting & Digital Finance ManagerRenault Argentina

Working with ABBYY was a rich experience, not only because we could truly improve and simplify several processes within the company but also because they delivered exactly as was promised and with great Time To Market

↳ Matias Ghirardi, CIO Renault Argentina

Challenge

- Needed to automate a completely manual invoice processing system that was slow and prone to error.
- Complex invoices that involved customs and foreign trade details.
- Solution had to process documents in multiple languages and integrate with SAP ERP financial software.

Solution

- Automation of the entire invoicing process. Invoices arrive as email attachments. ABBYY extracted the invoice and all the data in any format and language and delivers validated data to the ERP. It located incoming emails, extracts the invoices, captures and then extracts data from a range of formats, languages, and fields.

Value

- SAP Invoice loading time was reduced on average from 12 minutes to 1 minute per invoice.
- The number of people interacting with the processes reduced from 2 to 0.5 people.
- Staff have time to perform higher-value work. 95% accuracy for capture and text recognition.

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How We Do It

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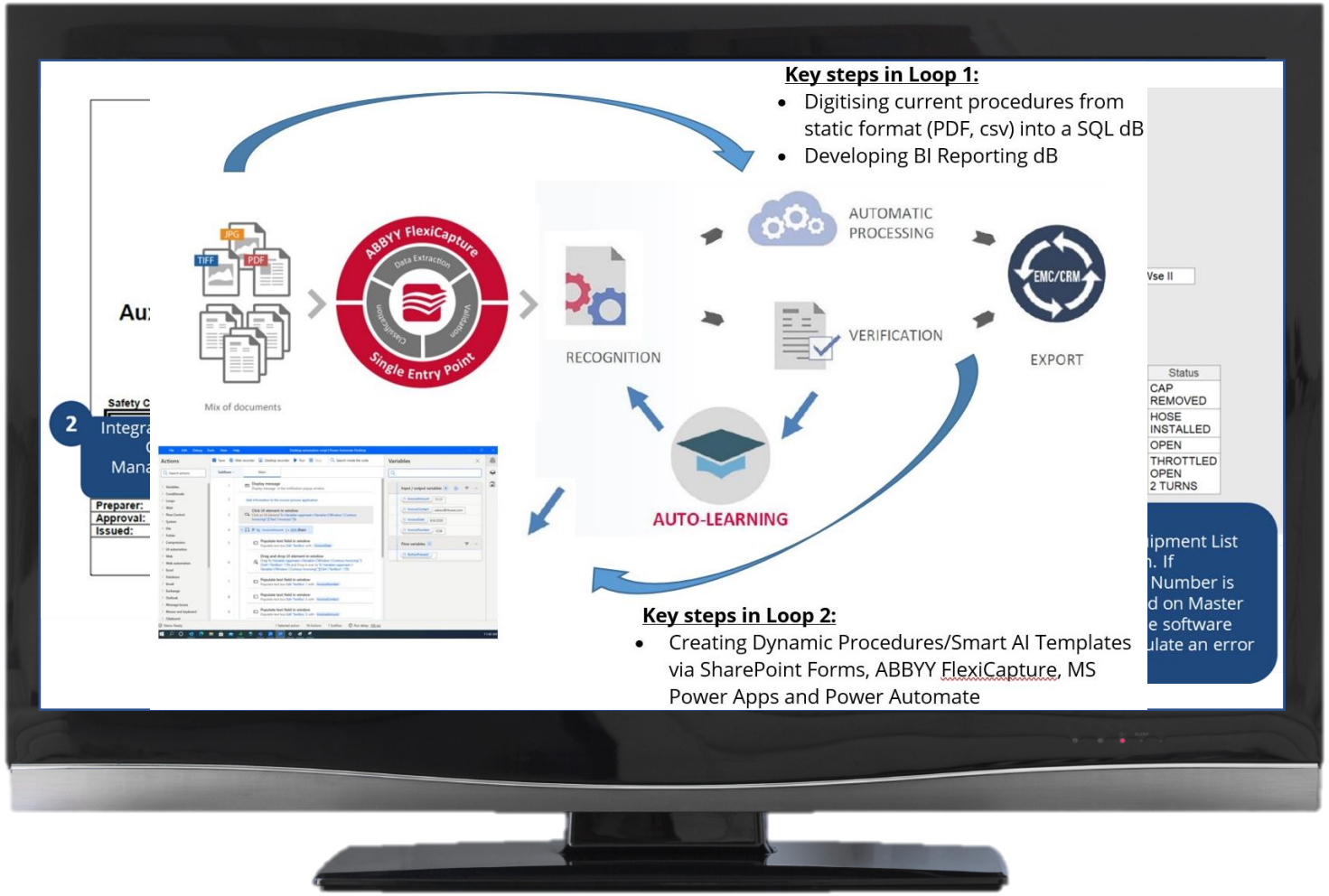
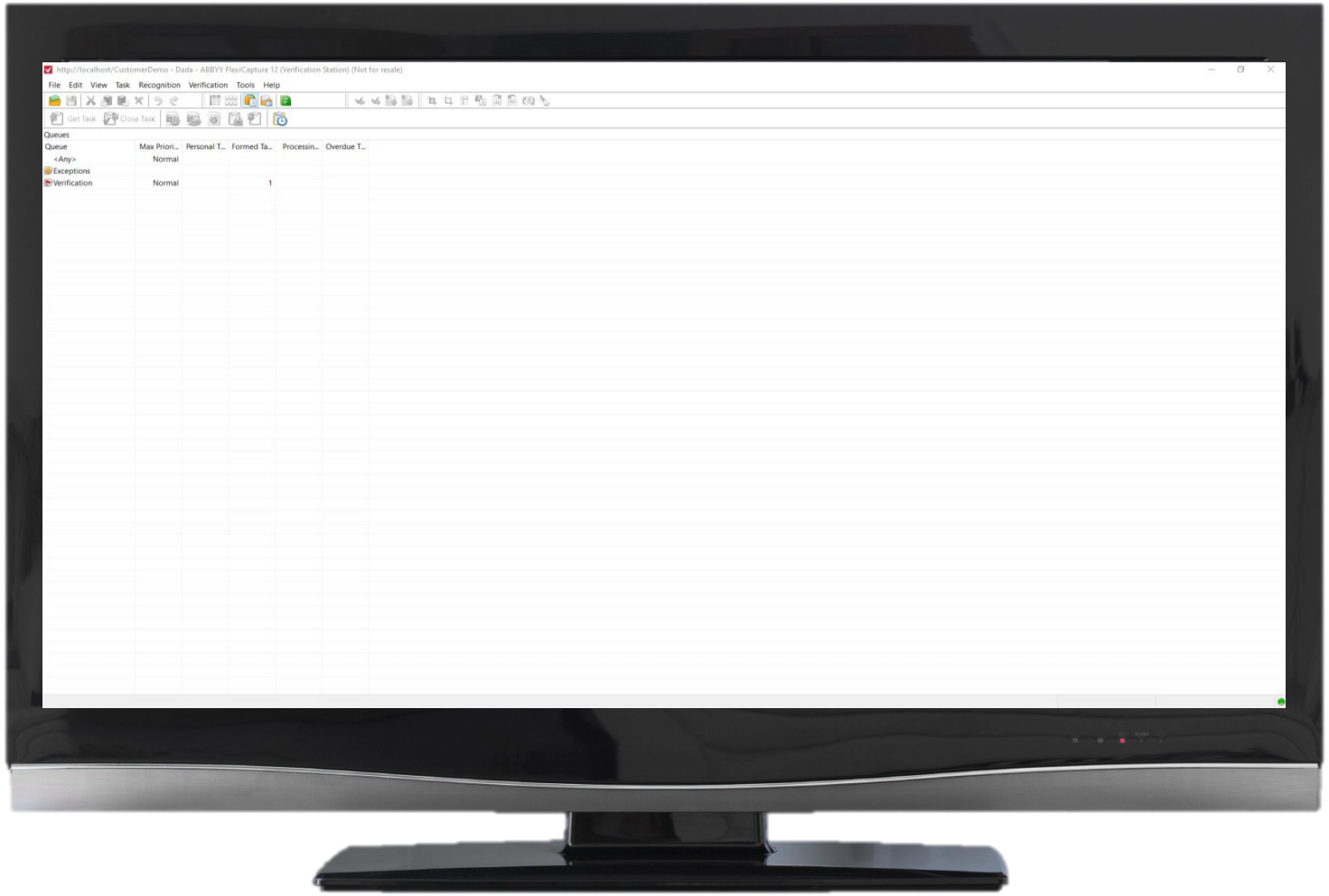
ABBYY FlexiCapture overview

- Here we demonstrate how the data elements above are extracted. Once the extracted fields have been migrated to a SQL dB, a 2nd loop would then extract the data into SMART AI templates..
- Data once in a SQL dB is then inserted into a Client-Side Pre-Production / Production dB for verification.
- Here we show how we can extract the data for verification, to then import into Power Platform/Ui Path / SharePoint in the 2nd loop to create SMART AI templates.



ABBYY FlexiCapture overview

- **Q-Screen** for intelligent data extraction with high-level of confidence on accuracy.
- **Database and system checks** to confirm against database lists (e.g. Master Equipment Lists, Office 365, DCMS).
- **Export of data** into a SQL dB for manipulation and transformation.
- Data once in SQL dB for verification to then insert into **a Client Side Pre-Production / Production dB** for sign-off and to provide comments.



ABBYY FlexiCapture overview

Strengths

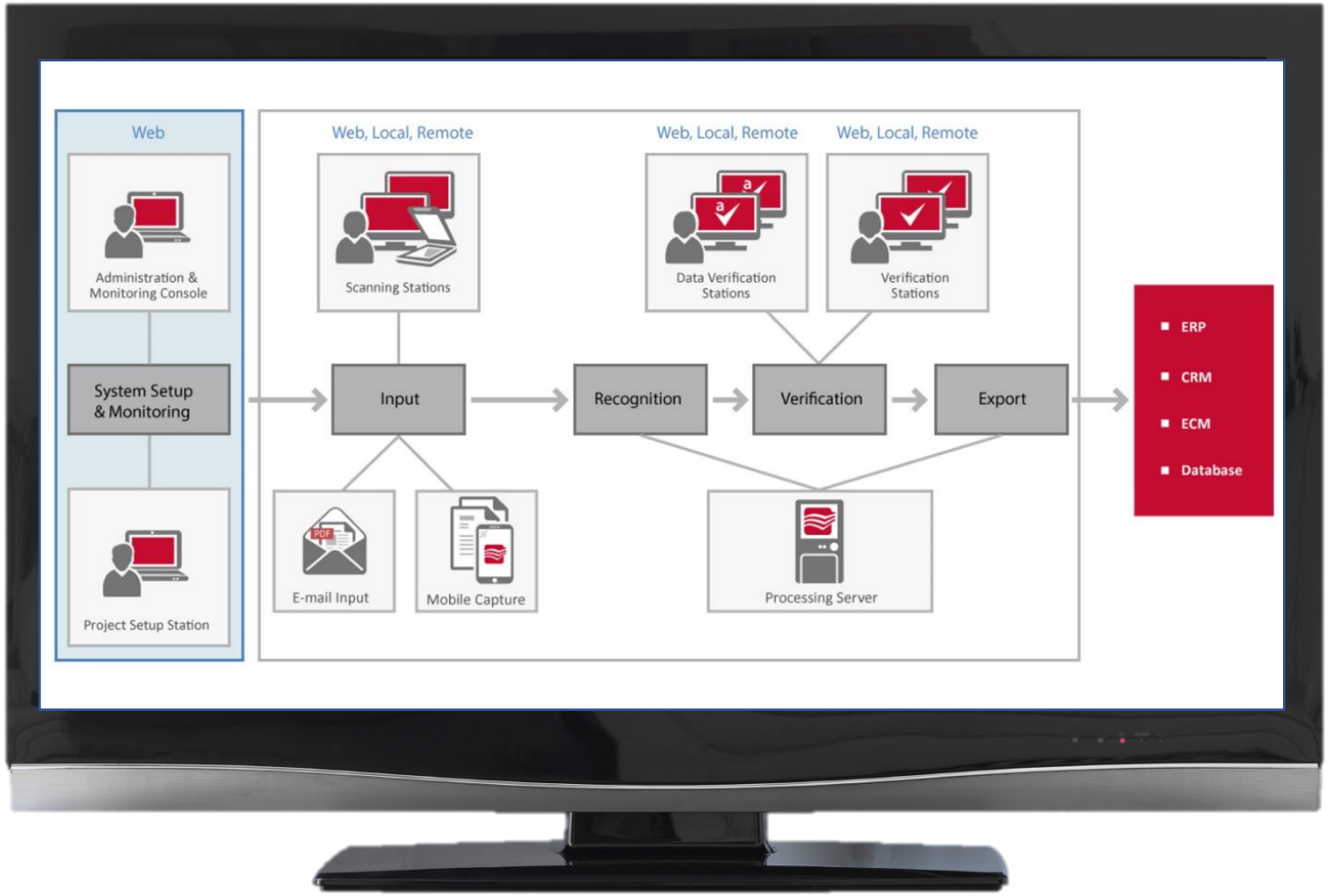
- Classification/Extraction
- Auditing documents for presence of sections/keywords
- Machine Learning to accommodate varying locations of data

Weaknesses

- Grammar/Punctuation auditing
- Translation of documents

Opportunities

- Verification stations for quality assurance via Group and Field verification



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ABBYY FlexiCapture overview

Steps here would be to:

- Design the form fields and **connect back to SQL Query Lists.**
- Format templates with **correct branding** and document references.
- Ensure **form validation** based on global parameters selected.
- **Database and system check** to confirm against database lists (e.g., Master Equipment Lists, Office 365, DCMS).
- **Q-Screen for intelligent data extraction** with high-level of confidence on accuracy.

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Siemens Case Study: Citizen development, language processing, and machine learning capabilities

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Intelligent Document Processing (IDP)

IDP software solutions blend the power of AI technologies to automate process all types of documents

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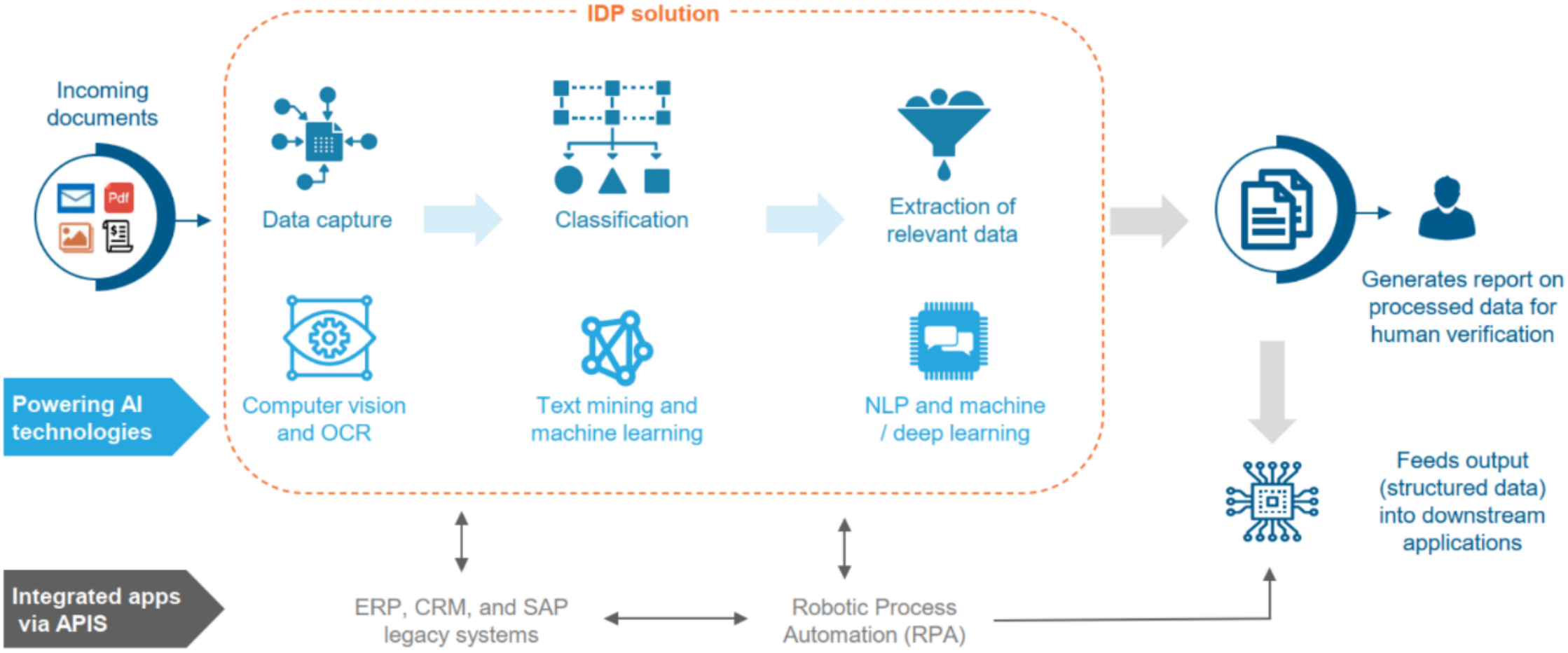
Ingenuity for life



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ABBYY FlexiCapture

- Multi-channel Input
- Machine learning
- Advanced Classification
- Supports 198 languages
- Supports Structured, Semi-Structured and Unstructured documents
- Supports integration with RPA, ERP and CRM etc
- High scalability
- Customers – Siemens, Samsung, IBM, EPSON, Xerox etc
- Citizen development GUI Based verification

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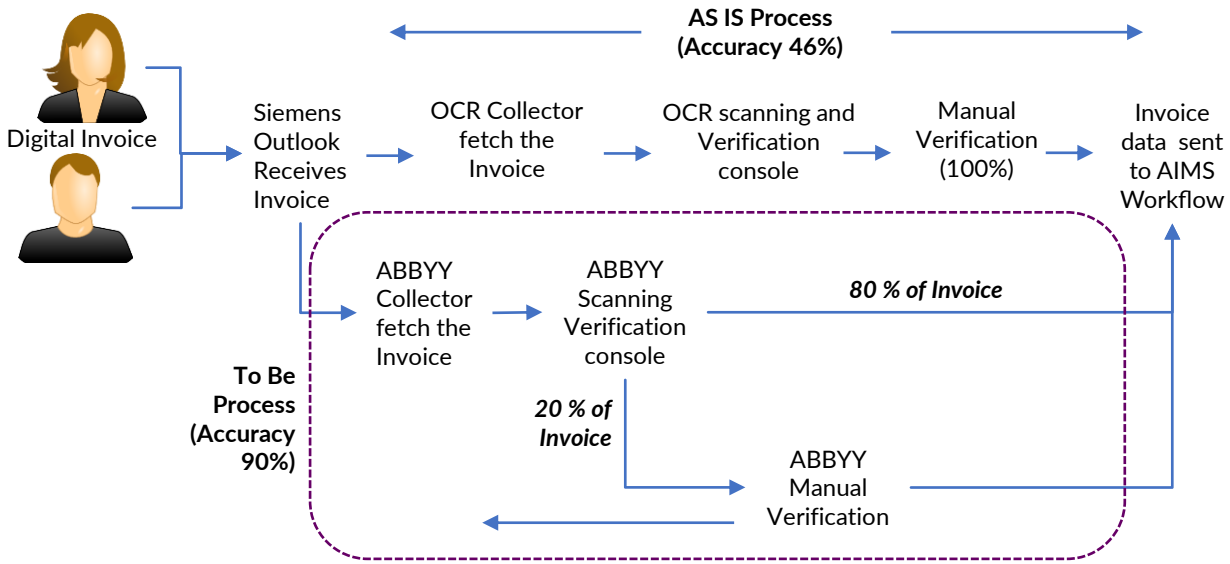
POC (Invoice Processing)

- Pattern based template based on analysis for 20 type of invoices
- Template for Invoice #, Invoice Date, PO #, Total amount and Bill to and Ship to
- Overall Confidence level is 95% vs Old OCR Solution Accuracy is 46%
- No Human touch Automated for 80 % of invoices, with need for manual intervention lowered to 20 %
- Machine learning capabilities available
- Integration functionality with Outlook, ERP and other web based tool
- Business Case for India, ME & AFR is Positive

AS IS and TO BE Model



Project Initiation for IN, ME & AFR

- India and MEA Go Live completed

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Initial ABBYY project results

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Results India P2P

3 476 983 pages
(708 361 documents) were processed from 31.5. - 31.7.

95% confidence
(Old OCR Solution had a accuracy of 46%)

80 %
...is the current automation rate

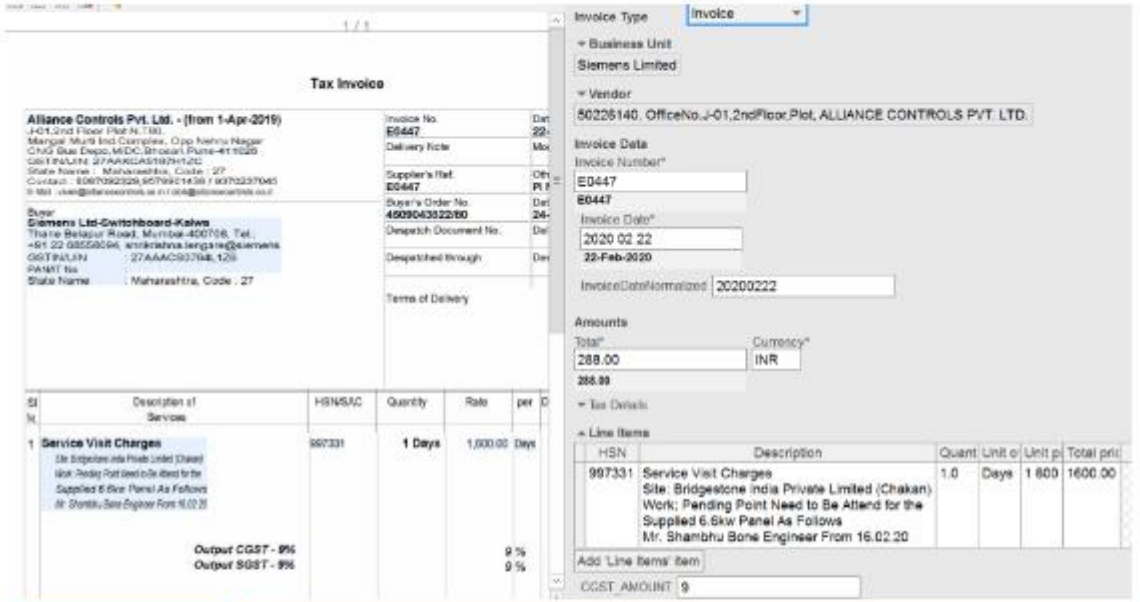
20 doc. types
...of invoices in scope

Integration...
...with Outlook, ERP and other web applications

Business Case for India, ME & AFR is...
Positive...

40% ...
...increase in productivity

Document to Data



Old OCR Solution

1. Invoice #
2. Invoice date
3. PO Number
4. Total Amount
5. Vendor Name
6. Siemens AREs
7. Barcode

ABBYY Fields

- Invoice date
- Invoice #
- PO Number
- Total Amount
- Vendor Name
- Siemens AREs
- Vendor GST #
- Siemens GST #
- Taxable Amount
- CGST Rate
- GST Amount
- SGST Rate
- SGST Amount
- IGST Rate
- IGST Amount
- UTGST Rate
- UTST Amount
- Bill To address
- Ship to address

Line item details

- HSN#
- Description
- Quantity
- Unit Price
- Total Prices
- Quantity measure
- Tax details
- Barcode
- Signature

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Process Model

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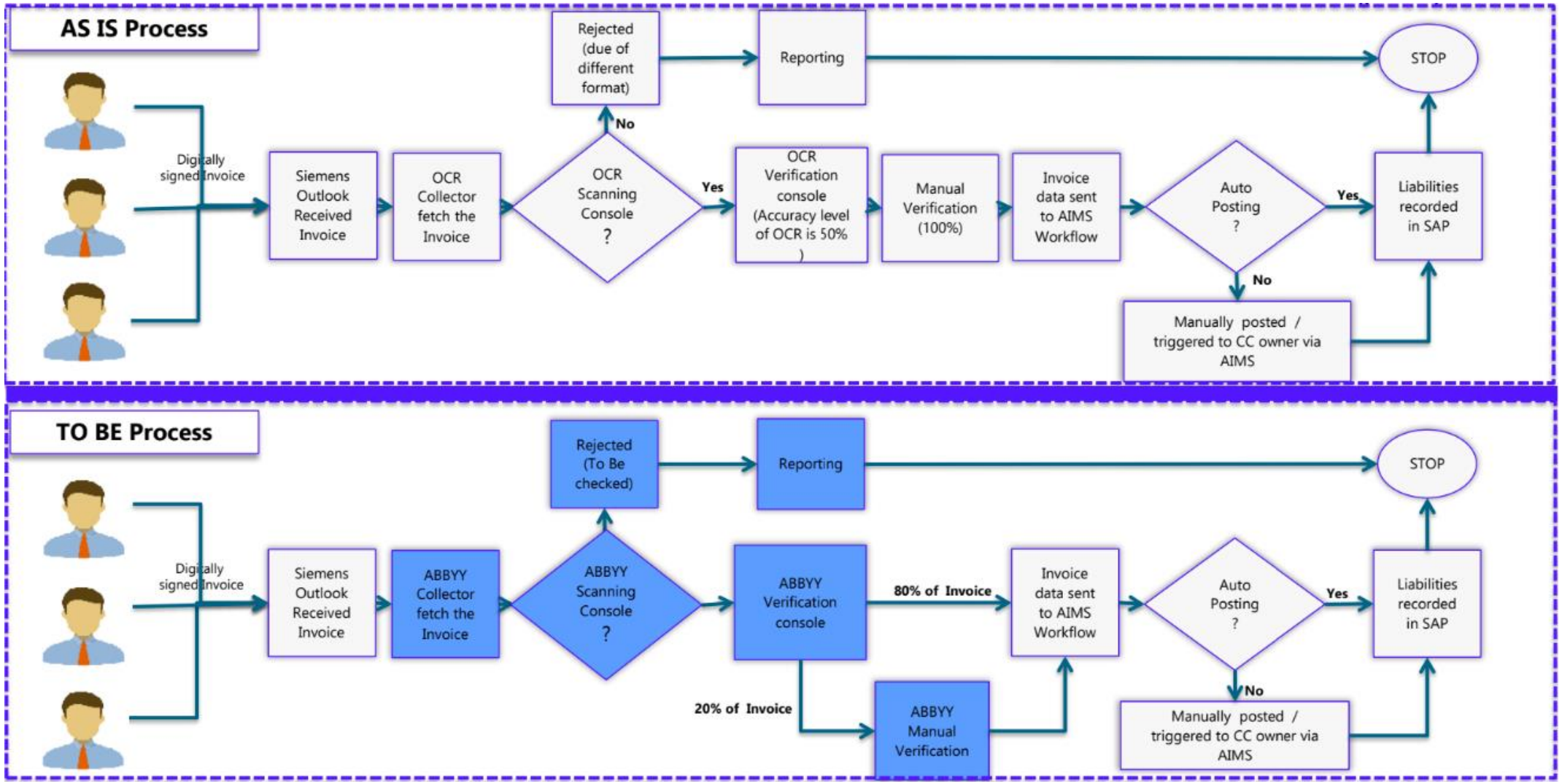

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Lessons Learnt from Siemens Case Study

- Role of AI in automating mundane, time-consuming and mind-numbing repetitive tasks such as transferring data between legacy systems.

- Even though this type of automation relieves employees and increases the value of their productivity, it is typically focused on very discrete tasks and falls short when trying to automate more complex activities that can have significant impact on customer experience.

- Most customer interactions involve communications that contain unstructured content like documents, emails, chat messages, correspondence, etc. The key to fully automating such content-centric processes is to be able to understand the data, extract insights, and enable automation platforms to make human-like decisions.

- Content Intelligence provides the cognitive capabilities and skills that enable automation platforms and digital workers to understand and process documents like a human, without any human interaction. When the data within business documents is understood, transactions can be executed faster, with higher precision, and compliant to process and regulatory requirements, while available resources multiply their output and efficiency

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Summary

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5 Steps to Intelligent Document Processing

1

Understand what is being automated, and why

Key to process-based automation is the ability to analyse the processes within your organisation, their variations, and their corresponding costs in order to determine which ones to automate first, and to design their automation in a way that delivers optimal results.

2

Enhance existing automation infrastructure with Content Intelligence

Standardising processes, reducing human interaction, and connecting systems is key to automation. However AI needs to go further and focus on content. By applying understanding to extract meaning from documents via AI-powered Content Intelligence.

3

Achieve higher value through democratising automation

Deploying a low-code / no-code, extensible Content Intelligence platform allows business groups to further speed-up the digital transformation journey by utilising trained cognitive skills created by their peers, without any machine learning, capture, or coding experience.

4

Ensure compliance by reducing process variations and error

Utilising intelligent, highly accurate content and document processing allows automated, straight-through processing of business transactions. Human interaction is then reserved for handling exceptional cases or validating the results of the automated process as necessary.

5

Continuously improve customer service quality to stay ahead of competition

Models need to continuously learn and improve from new variations and human interaction. Extending automation to new use cases by training new extraction models, ongoing improvement of existing models and monitoring results.

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Candidates for mass OCR digitisation & automation

- What work do you do a lot of?*...Is it high volume?*
- What work does repeat over and over?*...Is it repetitive?*
- What work do they do where they have to manually enter data?*...Is it manual?*
- What work do you do that uses multiple legacy systems?*...Do they have to copy and paste data when switching multiple legacy systems?*
  - What work do they do that has logic and rules?*...Is it rule based?*
  - How many full-time employees does this work?*...Does it require a lot of employees' time?*

Checklist when reviewing candidates for electronic forms

Multiple views	Access data within the SharePoint	Rules	Validation
Does the form need to have views that are shown or hidden based upon the logged-in user or conditions met within the form?	Does the form pull in and use data from SharePoint lists or other data sources in form fields (such as choice and drop-down fields)?	What rules are utilised that dictate data, field, and section behaviours based upon selections and conditions in the form? E.g., read-only fields	Are certain fields required in the form and data must be entered in them? Should data be verified as a certain format?

Anonymous or external user submissions	Mobile layouts	Branding	Panels
Do users outside of the organisation need to submit forms that capture the data internally?	Does the form need to account for multiple layouts that are viewed on desktop browsers, mobile phones, and tablets?	Are there requirements for branding and look-and-feel changes?	Should controls be logically grouped together? Does a label and border need to be displayed around the group?

Repeating sections	Confirmation / cancellation messages	List column updates	Workflow task forms
Does the form contain grouped sets of other controls? Should form users be allowed to insert multiple instances (rows) of the set as needed?	Does a custom message need to be displayed if a form is successfully submitted or cancelled?	Does adding or updating content in form fields update list column data for the item upon form submission?	Should workflow task forms be customised to collect additional data and have a different visual design?

Practical applications

What are the potential benefits from mass OCR digitisation and digital process automation?

- AI-powered Content Intelligence can ensure that Engineers are writing their procedures correctly
- Creation of Work Orders can be automated (e.g. by integrating COINS and Asite) with straight-through processing to update the Enterprise Asset Management (EAM) system in SAP PM without double entry.
- Process blockages can be alerted on NEC4, HSEQ and commercial compliance.
- Safety inspection can be filled in customised mobile forms remotely, even when there is no mobile signal.
- Digitised document management with certificates submitted electronically to a central data repository and saved in Office 365 and company's DCMS.
- Engineering procedures are correctly written, by bookmarking specific sections for human review.

Lessons Learnt

1. Successful automation of content- and document-centric processes requires the cognitive skills to understand and extract meaning from a variety of documents out of-the-box.

2. In order to achieve real value from their investment in automation, a more strategic approach to automation is needed. This encompasses the utilisation of artificial intelligence (AI) and machine learning to transition to more complex, process based automation.

3. In order to meaningfully connect existing business systems such as RPA, ECM, BPA, ERP, etc., and achieve straight-through processing without human interaction, organisations need to enhance their document process automation beyond just OCR and implement AI-powered Content Intelligence.

4. Utilising intelligent, highly accurate content and document processing allows organisations to design automation flows that perform straight-through processing of business transactions with or without a human in the loop.

5. Models need to continuously learn and improve from new variations and human interaction. Extending automation to new use cases by training new extraction models, ongoing improvement of existing models and monitoring results.

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Solutions guaranteed.

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THANK YOU

Please send us your questions. We will be waiting for them.

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